- 27 -

EXCEPTIONAL PRESERVATION OF THE BRACHIDIUM IN TERTIARY TEREBRATELLIDINES (BRACHIOPODA, RHYNCHONELLIFORMEA) FROM PATAGONIA

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The brachidium is a delicate and fragile internal skeletal structure possessed by many rhynchonelliformean brachiopods. Shaped like a thin ribbon made up of fibrous calcite, it hangs in continuity from the crura, and projects into the mantle cavity. Its function is to provide further support to the lophophore (food gathering organ bearing filamentous tentacles, also involved in respiration). In the case of fossil material, inasmuch as the structure was not severely damaged by biostratinomic processes (as often is), the main techniques for revealing brachidial shape are serial sectioning (when sedimentary matrix is lithified) or careful mechanical excavation (when surrounding sediment is friable enough). Brachiopod shells collected from the early Miocene Centinela Formation, cropping out near Lake Cardiel (Santa Cruz province), include fine specimens with their loops in exquisite three-dimensional preservation. As the shells were tightly closed and void, destructive or potentially risky procedures were unnecessary to expose the detailed morphology of such slender structures. This important finding is thus interesting from both morpho-anatomical as well as taphonomical viewpoints. The development and peculiar preservation of a loop showing descending and ascending lamellae plus transverse band joined in organic connection allow referring it to the teloform type, and support assigning the specimens among the terebratellidines. Besides, such brachidium morphology suggests that in life it was compatible with a lophophore having zygolophe up to plectolophe degree of complexity. A remarkable preservational feature is the unusual crystalline drusiform lining, product of diagenetic precipitation that coats the brachidium and the inner surface of both valves.

- 28 -

DIFFICULTY DEGREE OF THE MEASURING INSTRUMENTS (MULTIPLE CHOICE) IN MORPHOPHYSIOLOGY

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After an evaluation has been being administered and scored, it is convenient to analyze each of its items. This procedure gives information about the degree of difficulty determined by the amount of correct answers provided by the student. The degree of difficulty is calculated dividing following number of correct answers by the total number of students. It varies between values close to 0 (when the item is difficult) or to 1 (when it is of low difficulty). We analyzed 8 multiple choice items taken by 99 Physiology course students of the Dentistry School. The degree of difficulty for the items under analysis were: 0.73; 0.46; 0.35; 0.42; 0.53; 0.50; 0.68; 0.83, respectively. The lowest difficulty item was number 8 whereas the most difficult was item number 3. This instrument should be correlated with other didactic elements in order to take decisions.